

Raytech subsequently filed for bankruptcy in Connecticut and attempted to relitigate the successor liability issue in the new forum.<sup>19</sup> Raytech then sought a declaration that such liability was limited. Raytech's unlimited liability was finally resolved in February 1998.<sup>20</sup> Two months later, Raymark Industries filed a voluntary petition for bankruptcy in Utah.<sup>21</sup> The case was transferred to Connecticut.<sup>22</sup> The Connecticut court noted the following:

The joint administration of these cases is more than merely appropriate and just—it is necessary to prevent the decisions in Schmoll, White, and Raytech, which imposed unlimited successor liability on Raytech, from being vitiated. The predicate for each of those decisions was the finding that a sophisticated corporate restructuring scheme was designed with the improper purpose of escaping asbestos related liability . . . .<sup>23</sup>

The bankruptcy of Raytech in 1989 is listed in Table D.1, but not the involuntary bankruptcy of Raymark in 1988, because the Raytech bankruptcy was essentially a continuation of the Raymark bankruptcy, which had ended without compensation of the asbestos claimants. Neither did we list the filing of Raymark in 1998, following the reasoning of the bankruptcy court quoted above. In 2002, the Raymark-Raytech bankruptcy was in the final stages of creating a personal injury trust.

In a similar case, asbestos claimants who were exposed to Celotex products pursued claims against Hillsborough Holdings Corp., the new parent of Jim Walter Industries, a former parent of Celotex. Hillsborough filed for bankruptcy in December 1989—almost a year before Celotex's bankruptcy petition was filed.<sup>24</sup> The Hillsborough reorganization plan, confirmed in March 1995, included a settlement of \$375 million for a class of asbestos tort creditor-claimants who had been able to “pierce the corporate veil” and establish rights to Hillsborough's assets. The funds were held for the Celotex bankruptcy court to distribute to claimants through the Celotex personal injury trust.<sup>25</sup> The settlement agreement was approved even though preliminary litigation in the bankruptcy and trial courts suggested that the claimants would not be successful in their attempt to pierce the corporate veil of Hillsborough

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<sup>19</sup> *In re Raytech Corporation*, No. 89-00293 (D. Conn. 1989).

<sup>20</sup> *Raytech Corp. v. White*, 54 F.3d 187 (3d Cir. 1995), *cert. denied*, 516 U.S. 914 (1995), holding that Raytech was collaterally estopped from relitigating the question of successor liability; *Raytech Corp. v. Official Committee of Unsecured Creditors*, 217 B.R. 679 (Bankr. D. Ct. 1998), holding that Raytech's liability for Raymark was unlimited.

<sup>21</sup> *In re Raymark Corporation*, No. 98-24212 (D. Utah, filed 4/15/1998).

<sup>22</sup> *In re Raytech Corp.*, 222 B.R. 19 (Bankr. D. Ct. 1998).

<sup>23</sup> 222 B.R. 19 at 25.

<sup>24</sup> *In re Hillsborough Holdings Corp.*, 176 B.R. 223 (Bankr. M.D. Fla. 1994).

<sup>25</sup> “Hillsborough Holdings Reorganization Plan . . .,” 1994, p. 19.

and collect compensation from Hillsborough for their exposure to Celotex's products. Judge Parskay wrote:

Notwithstanding the Debtors' probability of success on the merits, the Debtors have sound business reasons for eliminating the threat of future litigations. The court believes it prudent to approve the [settlement and plan] to avoid the crippling effect that continuance of the litigations of Settlement Claims would likely have on the Debtor's businesses ("Hillsborough Holdings Reorganization Plan . . .," 1994, p. 19).

In Table D.1, we did not list Hillsborough Holdings as a separate bankruptcy, having included the settlement under the umbrella of the Celotex bankruptcy. Table D.1 also omits the bankruptcies of Celotex subsidiaries Carey Canada, Panacon, Phillip Carey Company, and Smith & Kanzler.

## **Recent Bankruptcies**

In 2000, the annual rate of asbestos-related bankruptcy filings increased sharply and continued to increase through 2002. Seven companies filed for bankruptcy in 2000, ten filed in 2001, and 12 filed in 2002. The rate of filings fell in 2003 and the first half of 2004; only six asbestos defendants filed for bankruptcy in 2003, and four asbestos defendants filed through summer 2004. However, as mentioned above, many observers of asbestos litigation have suggested that the possibility of federal legislation has led some defendants who would have filed for bankruptcy to hold off doing so in the hope that federal legislation would obviate the need for them to do so. If that is true, federal inactivity in this area could lead to additional bankruptcy filings.

Of the 29 companies that filed for bankruptcy between January 2000 and December 2002, six were valued at more than \$1 billion: W. R. Grace, Owens Corning, Kaiser Aluminum, U.S. Gypsum Company (USG), Armstrong World Industries, and Federal-Mogul Corporation. All six are publicly traded. We compiled relevant litigation and financial data for these six companies from SEC and bankruptcy filings (see Table 6.5).

## **Economic Effects of Bankruptcies**

### **Transaction Costs**

Previous research on the legal, accounting, and other transaction costs of bankruptcy reorganization (Franks and Touros, 1989; Weiss, 1990; White, 1996) shows that the cost of reorganization is equal to about 3 percent of a firm's book value or about

**Table 6.5**  
**Financial Data for Bankruptcies Exceeding \$1 Billion (dollar amounts in \$ millions)**

	Armstrong World Industries	Federal-Mogul	Kaiser Aluminum	Owens Corning	USG	W. R. Grace
Number of Employees	18,900	50,000	7,800	20,000	13,700	6,300
Bankruptcy filing date	12/6/00	10/1/01	2/12/02	10/5/00	6/25/01	4/2/01
Court	D. Delaware	D. Delaware	D. Delaware	D. Delaware	D. Delaware	D. Delaware
Case number	00-04471	01-10578	02-10429	00-03837	01-02094	01-01139
Assets	\$4,164	\$10,150	\$3,364	\$6,494	\$3,200	\$2,493
Liabilities	\$3,297	\$8,860	\$3,100	\$5,710	\$2,740	\$2,570
Asbestos liability	\$484	\$1,818	\$621	\$685	\$1,185	\$1,003
Available insurance	\$236	\$771	\$501	\$59	\$76	\$369
Prepetition claims	\$173,000	\$365,000	\$112,000	\$36,000	\$100,000	\$124,000
Reorganization cost	\$12	\$51	NA	\$111	\$12	\$16

6 percent of a firm's market value. But, to date, no one has studied the costs of asbestos bankruptcy reorganization. The bankruptcies that have been studied involved large publicly traded corporations comparable in size to large asbestos defendant corporations. But reorganization costs for asbestos defendants may be higher than the 3 (or 6) percent of a firm's book (or market) value reported in these earlier studies because none of the bankruptcies in those studies included massive numbers of tort creditors.

Various other bankruptcy-related costs also impinge on a firm's ability to do business. Bankruptcy disrupts relations with suppliers and customers. It also impairs, or entirely eliminates, access to credit. And bankruptcy distracts senior managers, diverting their attention from the firm's business activities to bankruptcy-related activities.

#### **Time to Resolution**

We collected information on the length of time from bankruptcy petition to confirmation of the reorganization plan for 11 major asbestos defendant bankruptcies. The average length of time from petition to confirmation for these 11 bankruptcies is six years, but three bankruptcies (National Gypsum, Keene Corporation, and Rock Wool Manufacturing Company) took only three years and one (Forty-Eight Insulations, Inc.) took ten years. However, these numbers do not accurately portray the length of time it has taken some corporations to move from bankruptcy petition to *paying claimants*.

Johns-Manville filed its petition in 1982, which was finally approved six years later, in 1988.<sup>26</sup> Payments began then but were suspended in 1990 (Smith, 1990) and did not resume again until 1995, 13 years after Manville's initial filing.<sup>27</sup> The Amatex reorganization plan was confirmed eight years after filing of the petition, but the Amatex Trust did not become operational until six years after that, or 14 years from the time the petition was first filed.

### Prepackaged Bankruptcy

In an effort to reduce the time and costs associated with the bankruptcy litigation process, asbestos plaintiff lawyers and debtors have increasingly adopted a strategy of negotiating reorganization plans *before* filing for reorganization under Chapter 11, an approach known as "prepackaged bankruptcy." In brief, before formally petitioning to file for reorganization, the debtor approaches asbestos plaintiff attorneys who currently represent large numbers of plaintiffs (and who, by inference, will represent large numbers of future claimants as well) and attempts to negotiate a plan that will secure the support of enough current tort creditors (i.e., plaintiffs and their attorneys) to gain approval from the bankruptcy court when the reorganization plan is filed. Bankruptcy law requires that all creditors vote on proposed reorganization plans, with half of the creditors by number who collectively have claims for at least two-thirds of the dollar value of claims outstanding required for approval. Under 11 U.S.C. §534(g), to secure a channeling injunction, asbestos reorganization plans must obtain a super-majority of 75 percent of all creditors.<sup>28</sup> Hence, if the debtor can secure agreement from attorneys representing 75 percent of current claimants (who will vote on behalf of their clients), the debtor is likely to be able to substantially reduce the time that would normally be required to negotiate a reorganization plan after filing a petition.<sup>29</sup>

Using a prepackaged bankruptcy approach, plaintiff attorneys and debtors anticipate reducing the time from petition to approval to as little as three to six months,

<sup>26</sup> *Matter of Johns-Manville Corp.*, 68 B.R. 618 (Bankr. S.D.N.Y. 1986), *aff'd in part, rev'd in part*, *Kane v. Johns-Manville Corp.*, 843 F.2d 636 (2nd Cir. 1988).

<sup>27</sup> *In re Joint Eastern and Southern Districts Asbestos Litigation*, 878 F. Supp. 473 (E.D.N.Y. 1995), *aff'd in part*, vacated in part, 78 F.3d 764 (1996).

<sup>28</sup> Future claimants, by definition, cannot vote on a proposed reorganization plan because they are not creditors. Bankruptcy judges typically appoint a "futures representative" to negotiate on behalf of future claimants' interests. In prepackaged bankruptcies, debtors have appointed "futures representatives" to participate in the negotiations on the reorganization plan. See Plevin et al., 2003 (reporting that David Austern, the General Counsel for the Manville Trust, was appointed by Combustion Engineering as the futures representative in the Combustion Engineering prepackaged bankruptcy).

<sup>29</sup> See, e.g., "Congoleum Files Prepackaged Chapter 11 Petition . . ." (2004), which reported that Congoleum announced in December 2003 that it had "received the requisite number of votes to approve its prepackaged bankruptcy plan" and had filed a petition for Chapter 11 reorganization. Congoleum's plan was sent to asbestos tort creditors in October 2003, two months before it filed for reorganization.

with comparable savings in bankruptcy litigation costs. For example, in July 2004, U.S. Bankruptcy Judge Robert McGuire and U.S. Judge Lynn Hughes of the Southern District of Texas confirmed a prepackaged bankruptcy plan for Utex Industries that had been filed with Utex's petition for Chapter 11 reorganization in March of 2004, just four months earlier.<sup>30</sup>

Through 2004, at least ten asbestos defendants have used a prepackaged bankruptcy strategy (see Table 6.6). The first corporation to use the prepackaged strategy was Fuller-Austin, which filed its Chapter 11 petition in 1998 (Plevin et al., 2003); all of the other prepackaged bankruptcies have been filed since 2001.

How prepackaged bankruptcies actually affect the time and expense required to resolve bankruptcy litigation is uncertain. In at least some of the bankruptcies listed in Table 6.6, debtors began negotiating prepackaged bankruptcies at least a year before finally filing their reorganization plans.<sup>31</sup> Moreover, some prepackaged bankruptcies have been challenged by creditors or insurers whose assets were relied on to fund the proposed trusts (Plevin et al., 2003; Parloff, 2004). When time and costs associated with resolving these issues are accounted for, adopting a prepackaged bankruptcy strategy may not in fact yield much savings. For example, a report of

**Table 6.6**  
**Prepackaged Bankruptcy Filings**

Debtor	Date of Filing
Fuller-Austin Insulation, Inc.	1998
Western Asbestos	2002
J.T. Thorpe Co.	2002
Shook & Fletcher Insulation Co.	2002
AC&S, Inc.	2002
Dresser Industries (DII)/Kellogg, Brown & Root (KBR) (Halliburton subsidiary)	2003
Combustion Engineering/ABB	2003
Congoleum Corporation	2004
Utex Industries, Inc.	2004
Quigley Co. (subsidiary of Pfizer, Inc.)	2004

<sup>30</sup> See "Utex Industries Files Prepackaged Bankruptcy Plan . . ." (2004).

<sup>31</sup> For example, the first reports that Dresser (DII) and KBR were seeking a prepackaged bankruptcy appeared in December 2002, and the first report that Congoleum had adopted a similar strategy appeared in January 2003. Dresser (DII) filed its petition for reorganization in December 2003 ("Halliburton, Equitas Reach \$575 Million Deal," 2004). Congoleum filed its petition for reorganization in January 2004 ("Congoleum Files Prepackaged Chapter 11 Petition . . .," 2004).

proceedings related to a challenge to Congoleum's prepackaged bankruptcy reorganization plan lists 24 law firms representing 19 interested parties.<sup>32</sup>

### **Costs to Workers**

Bankruptcy can impose costs on the filing firm's labor force. First, there is likely to be a reduction in the size of the firm's labor force. Workers who lose their jobs because of their employer's bankruptcy may incur a period of unemployment and, when they find a new job, are likely to earn lower wages. Further, both workers who lose their jobs because of their employer's bankruptcy and those who retain their jobs despite the bankruptcy incur financial losses to the extent that their pension plan holds shares of their employer's stock.

Stiglitz et al. (2002) estimated the magnitude of these costs for workers employed by asbestos defendants who filed for bankruptcy through September 2002. They developed a list of 61 asbestos-defendant bankruptcies through September 2002 and succeeded in collecting time-series employment data for 31 of them. Stiglitz et al. observed that the 31 firms include the largest firms among the 61 bankruptcies and likely account for about 90 percent of the total employment of all bankrupt asbestos firms combined. They compared the change in employment in these firms over the five years preceding their bankruptcy filing to the change in employment over that period for other firms in the same industry at the four-digit SIC code level.

Stiglitz et al. estimated that the 31 firms for which they had time-series employment data had lost about 52,000 more jobs than they would have if the firms' employment level had changed at the same rate as the employment level in the firms' respective industries as a whole. Assuming that the other bankrupt firms for which time-series employment data could not be obtained had incurred job losses, relative to job losses in their respective industries, at the same rates as had the firms for which data could be obtained, Stiglitz et al. estimated that bankruptcies of asbestos defendants cost a total of about 60,000 jobs.

Most of the workers displaced by asbestos bankruptcies will eventually find other jobs. However, they will generally suffer a period of unemployment and, when they do find a new job, they will likely earn lower wages at that new job. Assuming that the average displaced worker has 20 years to retirement and discounting their future wages to the present at a 5 percent annual rate, Stiglitz et al. (2002, p. 29) estimated that the present value of the displaced workers' wage losses adds up to between \$1.4 billion and \$3.0 billion.

A significant fraction of employees' pension plans includes stock in their companies. The bankruptcy of an asbestos defendant consequently can result in losses to

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<sup>32</sup> "Bankruptcy Judge Lifts Stay . . ." (2004). Prepackaged bankruptcies have also been the subject of charges of conflict of interest and denials of due process to certain creditors and other interested parties.

the defendant's employee pension plans. Stiglitz et al. estimated the impact of asbestos-related bankruptcies on the value of employees' pension plans by estimating the change in stock prices due to asbestos liabilities and calculating the effects of those changes on workers' retirement assets. They obtained time-series data on stock prices for 13 asbestos defendants who filed for bankruptcy prior to September 2002. They compared trends in the price of stock in each of these defendant companies for the five years prior to the companies' bankruptcy filing and up to five years after the filing to corresponding trends in stock market prices for a control group of companies, weighted for market capitalization, that produced similar products and faced similar market conditions during the comparison period. Each of the companies' stock significantly underperformed that of the control group.

Using SEC data to estimate the fraction of each firms' employee pension plan assets held in company stock, Stiglitz et al. (2002, p. 33) concluded that the average employee of those firms lost more than \$8,000 in pension assets when compared with what the pension plan assets would have been worth if the companies' stock had performed as did the company stock of the control group firms. The total losses in assets, Stiglitz et al. concluded, amounted to more than \$350 million.

### **Broader Economic Effects**

Bankruptcy is not the only economic effect of asbestos litigation. Defendants that have not filed for bankruptcy have nonetheless incurred asbestos litigation costs, including both their defense costs and the indemnity payments they made to claimants. These costs have consumed some of their resources and, in some cases, a significant fraction of their resources.

To finance investments in new plants and equipment, most firms first use their retained earnings. Only when firms have more good investment opportunities than they can finance from retained earnings do they turn to external sources of finance, such as loans or new equity issues. For asbestos defendants, each dollar paid out in defense costs and damage awards or settlements reduces retained earnings. As a result, these firms have fewer internal dollars available to finance investment. They may respond by reducing their investment levels by either limiting their investments to what can be financed using retained earnings or, if they borrow externally, eliminating investments that are unattractive because of the higher cost of capital. For example, Fazzari et al. (1988) estimate that a \$1 reduction in a firm's retained earnings will, on average, lead to a reduction of 42 cents in its investments.

Reductions in investment levels, in turn, can lead to reductions in the creation of new jobs. The average capital-to-labor ratio in U.S. durable goods manufacturing is roughly \$78,000. (This estimate is based on the value of the capital stock in durable goods manufacturing—\$861 billion in 1998—divided by the size of the labor

force in durable goods industries—10,985,000 workers in 1999) (U.S. Department of the Census, 2000, Tables 684 and 888). These figures imply that, on average, one less job is created each time a firm reduces its investment levels by \$78,000.

We can estimate the amount by which asbestos litigation costs reduce defendant firms' investments and, consequently, reduce the numbers of new jobs those firms create. However, the money paid to asbestos claimants and attorneys does not disappear. Some of the funds paid to claimants and their attorneys are likely saved. And some of these savings, in turn, will enter capital markets and become available to firms seeking investment funds. Thus, some of the funds removed from capital markets when retained earnings are used to compensate asbestos claimants return to those markets. Similarly, the number of jobs lost in the economy as a whole as a result of the adverse effect of asbestos litigation on defendants' investments could be at least partially offset by jobs created by firms that could afford to make investments only because claimants and their attorneys saved some of the funds they obtained from defendants. Because it seems unlikely that claimants and attorneys will save or invest all the funds they obtain from asbestos litigation, it would seem that asbestos litigation would result in some reduction in investments and job creation. But we lack the data needed to estimate the impact of the litigation on the economy as a whole.<sup>33</sup>

Nonetheless, bankruptcy per se is not the only effect of asbestos litigation costs on the financial condition of defendant firms and, consequently, the economy.

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<sup>33</sup> In earlier work (Carroll et al., 2002), we estimated the reductions in investments by asbestos defendants and, consequently, the reductions in jobs they created. Because these estimates did not take into account the extent to which the adverse effect on defendants' investments from asbestos litigation costs could be at least partially offset by jobs created by other firms, the numbers we cited in that earlier report were upper-bound estimates of the effects of asbestos litigation on the economy. However, these estimates were often cited by others as estimates of the net effect of asbestos litigation on the economy. We have come to believe that the potential misunderstanding of these estimates outweighs their value; therefore, we do not include them in this report.



## CHAPTER SEVEN

**Implications for the Future**

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When the Rand Institute for Civil Justice conducted its first studies of asbestos litigation in the early 1980s the litigation was surging, the Manville Corporation had just petitioned for Chapter 11 reorganization, and lawyers and judges were struggling to adapt civil procedure rules to the new phenomena of “mass torts” (Kakalik et al., 1983; Kakalik et al., 1984; Hensler et al., 1985). By the early 1990s, many parties to the litigation, lawyers, and judges had established routine practices for dealing with the litigation. Although questions about litigation practices and case outcomes remained, the perception of an asbestos litigation crisis that had characterized the 1980s had been largely abated. Some observers anticipated that the courts would fashion a global resolution to asbestos litigation, similar to the comprehensive settlements that had been achieved in other mass tort litigation.

The late 1990s saw an unraveling of those expectations. The U.S. Supreme Court rejected efforts to resolve future asbestos litigation through class action settlements. Defendants’ settlement programs foundered. New cases, including many claims from workers who had been exposed to asbestos but who were not functionally impaired at the time of filing, entered the system at a more rapid pace than they had previously. Payments to claimants with more-serious injuries increased substantially, perhaps because these cases had been undervalued previously. Many more corporations sought the protection of Chapter 11 reorganization to address their asbestos exposure liability.

With rapid growth in asbestos filings and costs, and new claims projected to be filed for several more decades, concern mounted as to whether there would be funds available to pay claimants who would come forward in the future. The allocation of compensation between those with serious or fatal injuries and those with legally cognizable injuries but little or no current functional impairment became a flash point of controversy. The spread of litigation beyond the major asbestos manufacturers raised questions about whether responsibility for asbestos injuries was being properly attributed. A flood of corporate bankruptcies traced to current and future asbestos liability exposure raised concerns about the effects of asbestos litigation on the economy. Many of those engaged in the litigation and many observers asked: Are there

alternative strategies for resolving asbestos litigation that would provide more adequate and fairer allocation of compensation dollars and more appropriate allocation of responsibility for payments, and achieve both ends more quickly and with lower direct and indirect costs than the current system?

Efforts to improve the resolution of asbestos litigation implicate strongly held views about the value of the tort system, which has traditionally been the primary vehicle in the United States for compensating victims of injurious behavior by others and an important tool for regulating corporate behavior. Those who believe that tort liability is the optimal system for resolving injury claims oppose substituting tort with a non-tort approach for resolving asbestos claims or modifying critical aspects of the tort system for asbestos plaintiffs. Even if some of these tort supporters might be persuaded that a different or modified system would be appropriate for resolving future *asbestos* claims, they still worry that adopting an alternate system for tort would set a precedent that would impair the rights of future *non-asbestos* injury victims.

Moreover, any effort to devise an alternative to tort for resolving asbestos claims must address the very same questions that have complicated resolution of the claims through tort: How many claims will come forward in the future? What will be the distribution of claims by severity of injury? What are the proper standards for allocating compensation among those with diverse injuries, ranging from nondisabling pleural scarring to fatal mesothelioma? How should the responsibility for paying for these injuries be allocated among those who manufactured or distributed asbestos products or operated workplaces in which asbestos was present?

For the past several years, plaintiff and defense attorneys, defendant corporations and insurers, labor unions, and the allies of all these groups have worked in various combinations and contexts to consider alternative strategies for resolving future asbestos claims. By the end of 2004, no proposal for comprehensively changing the asbestos litigation system had been able to garner sufficient support from the various stakeholders in the current system to be adopted into federal law, although some changes in substantive and procedural law affecting asbestos cases had been adopted by state legislatures and state court judges in certain jurisdictions.

### **Evaluating the Tort System's Performance in Asbestos Litigation**

Most of the factual data reported in this monograph are not disputed by participants in asbestos litigation. The sharp differences between and among plaintiff attorneys, defense counsel, defendant corporations, and insurers derive primarily from differences in assessments of the performance of the tort liability system and assessments of how well the tort system serves the interests of the various parties who have a stake in asbestos litigation.

### **Tort Objectives**

Traditionally, the tort system in the United States has been viewed as having three objectives: compensation, deterrence, and individualized corrective justice (e.g., Schwartz, 1997; Keating, 2000). In theory, the system properly compensates injury victims for their losses, properly calibrates defendants' incentives to avoid injuring others, and provides a sense that "justice has been done" through individualized consideration of each plaintiff's and defendant's situation. Moreover, as a common law (rather than statutory) system, tort liability has proved remarkably adaptable to changing social, cultural, and technological trends. The commitment of tort law to "make victims whole," deter injurious behavior, and provide individuals with their "day in court," as well as its adaptability to change, is generally seen as the justification for the tort system's transaction costs, which are understood to be considerably higher than the costs associated with delivering benefits through administrative systems, such as workers' compensation and social insurance schemes (Fleming, 1984; Sugarman, 1985).

In practice, empirical studies conducted over the past several decades have shown that the tort system often falls short of its goals (Hensler et al., 1991; Kakalik and Pace, 1986; Shanley and Peterson, 1983). It is difficult for individuals with meritorious claims for minor injuries to find representation because their cases require a significant investment of time and expense and offer limited potential damages in return (Kritzer, 2002). Although plaintiffs with more substantial injuries and viable factual and legal claims are more likely to find legal representation, their compensation may be limited by a variety of factors, including the defendant's ability to pay and the plaintiff's and plaintiff attorney's risk aversion.

When cases are pursued to trial, juries may award damages that reflect the jurors' perceptions of defendants' resources in addition to their assessment of defendants' culpability, or they may make judgments about causation that are scientifically questionable, or they may take into account such extra-legal factors as the plaintiff's race (Chin and Peterson, 1985; Ostrom et al., 1992 and 1996; Diamond, Saks, and Landsman, 1998). Plaintiffs with the same injuries and economic losses receive widely varying amounts, depending on the skills and incentives of the attorneys representing them, the jurisdictions in which their cases are brought and, perhaps, their own "attractiveness" as potential trial witnesses.

Because many plaintiffs with meritorious claims do not find their way to court, and because many suits are settled without liability ever being formally established, and because the outcomes of suits that are filed are uncertain, the theoretical deterrence value of tort is, in practice, eroded. Depending on the circumstances, the tort system may under-deter or over-deter injurious practices (Garber, 1998).

Moreover, most litigants find little in the way of individualized treatment or procedure. Ordinary tort lawsuits, such as automobile accident cases, are routinely settled according to long-established formulae. Product injury and toxic exposure

cases are typically handled in aggregative forms, with little involvement of individual plaintiffs (Hensler, 1998).

Notwithstanding these limitations on tort's performance, it has proved to be a remarkably adaptive system, with an ability to modify substantive legal doctrine and procedural rules to meet the challenges of new types of harms, changing cultural norms, and new forms of social and economic organization.

### **How Does Asbestos Litigation Measure Up?**

**Compensation.** Ordinarily, only a small fraction of all those who are injured seek compensation from the courts (Hensler et al., 1991). Typically, the high costs of tort litigation screen out of the system the majority of claims for minor injuries and modest losses. In asbestos litigation, however, mass litigation strategies have effectively opened the courts to everyone who can prove exposure to asbestos and demonstrate a legally cognizable injury. As asbestos litigation has continued, an increasingly large fraction of those who have come forward and found representation are not currently functionally impaired, although they do meet the legal standard for a compensable injury in most jurisdictions.

Some participants in asbestos litigation and some observers as well view asbestos claimants' increased access to courts (in comparison with other tort victims) as a positive achievement, fulfilling—at least in this instance—the promise of tort law. Others argue that opening the system so widely jeopardizes the ability of the tort system to compensate all claimants who may have a claim in the future, some of whom will have serious or fatal injuries.

Because the typical asbestos claimant receives compensation from dozens or more defendants, the only source of information about adequacy of total compensation is the plaintiff attorney. To our knowledge, there is no published research comparing the total compensation received by asbestos plaintiffs with their economic loss, nor were we able to obtain such data for our study. It is certain that many of the asbestos personal injury trusts established as a result of Chapter 11 bankruptcy reorganizations pay only a small fraction of the agreed-upon value of plaintiffs' claims; there is no reason to believe that the bankruptcy reorganizations currently in process will yield vastly different outcomes. How these diminished payments resulting from bankruptcy will affect adequacy of compensation is uncertain, as shortfalls in compensation from bankrupt defendants may be met by increased compensation from corporations that are newly drawn into the litigation. Moreover, if asbestos personal injury trusts limit attorney fees, asbestos plaintiffs may receive a larger fraction of the dollars paid out by the reorganized defendant corporations. The experience to date is too slim and varied to determine whether such potential savings in transaction costs will be realized and passed on to asbestos plaintiffs. How limitations on attorney fees imposed by some bankruptcy personal injury trusts might affect claiming rates in bankruptcy is also uncertain; the modest limitations on attorney fees imposed by the

Manville Trust do not seem to have diminished claiming rates, but severe restrictions on attorney fees might impair claimants' ability to bring claims against the trusts.

**Deterrence.** The historical case against asbestos manufacturers has been widely discussed in articles and books about the inception of the litigation (Brodeur, 1985; Castleman, 1996). Companies such as Johns-Manville (later renamed the Manville Corporation) were central to this history, as were some of the other asbestos product manufacturers that were the prime targets of litigation through the 1980s. As the litigation has spread to companies outside the asbestos and building products industries, the culpability of the defendants called upon to pay asbestos victims is more in dispute, although some corporations that became major targets of litigation in the 1990s found themselves in that position as the result of acquisitions of other corporations whose responsibility for widespread asbestos exposure is indisputable (Tweedale, 2000).

From a deterrence perspective, the issue is not whether asbestos victims should be able to receive compensation from *some* entity, but rather *which* entity can fairly be called upon to shoulder the financial burden. Requiring companies that played a relatively small role in exposing workers to asbestos to bear substantial costs of compensating for asbestos injuries not only raises fundamental questions of fairness but undercuts the deterrence objectives of the tort system. If business leaders believe that tort outcomes have little to do with their own behavior, then there is no reason for them to shape their behavior so as to minimize tort exposure.

**Individualized Treatment.** In principle, the tort system promises individualized justice to plaintiffs and defendants. Empirical research suggests that individualized treatment satisfies people's desire for procedural fairness, which in turn leads to trust in the justice system (Tyler, 1990). In practice, tort litigation often offers little individualized treatment in ordinary or mass litigation (Hensler, 1995 and 1998).

In asbestos litigation, individualized process is a myth. Most cases are settled, many according to standardized agreements negotiated by defendants and plaintiff attorneys to apply to what attorneys conventionally refer to as their "inventories" of cases. Under such agreements, all cases against some defendants may be settled for a flat fee, while cases against other defendants will be sorted into a "matrix" of claims, according to a few distinguishing characteristics, and paid the values associated with the different matrix cells. Bankruptcy personal injury trusts, which will pay an increasing share of asbestos compensation in the future, institutionalize this administrative compensation process for asbestos claims.

Among the small numbers of asbestos claims that reach trial, a majority is tried in group form, along with a few or more like or unlike claims. Sometimes, more than a hundred claims may be tried together; sometimes, the trial of a few claims will decide critical outcomes for thousands more. Claims against multiple defendants, in arguably quite different circumstances, may also be tried together. Although consoli-

dated trials are not unique to asbestos litigation, they do appear to be more prevalent, of a larger scale, and more complex in asbestos litigation than in other mass torts.

**Adaptability.** Whatever observers may think of the tort system's achievements or failures in asbestos litigation, few would disagree that the system has proved to be incredibly adaptive. State legislatures have changed statutes of limitation to address latent injury torts. Some states have adopted new definitions of injury to address asbestos lawsuits that do not claim any current impairment or functional disability. The federal judiciary has used its authority under 29 U.S.C. §1407 to collect all asbestos lawsuits filed in federal courts and transfer them to a single judge for pretrial purposes, and that judge has used his authority to settle or dismiss thousands of claims. Federal judges have attempted to resolve future asbestos claims through class action settlements, but these settlements were set aside by the U.S. Supreme Court. State judiciaries have adopted new rules for collecting asbestos claims within their states and assigning them to a single judge for pretrial and trial purposes. Federal and state court trial judges have devised special procedures, sometimes supported by sophisticated data analysis, to settle large groups of asbestos claims. State trial court judges have used a dizzying array of procedures to try asbestos claims in the aggregate. Federal and state trial judges have adopted new calendaring rules, deferring processing of lawsuits not claiming a current functional impairment and expediting claims of mesothelioma and other cancers (see Chapter Three).

While they reflect the adaptive ability of the courts, these mechanisms are not uniformly welcomed or celebrated. Whose interests are served by deferred dockets, consolidated trials, and other special practices for asbestos cases—and indeed, whether courts do or should have the power to adopt such special practices—is sharply disputed.

### **Is There a Better Way?**

Since the inception of asbestos litigation in the 1970s, more than 15 bills have been introduced in the U.S. Congress proposing to change the nation's approach to resolving asbestos claims. As asbestos claims surged anew in the late 1990s and early 2000s, reform efforts proliferated, ultimately resulting in the most intensive effort to devise federal legislation to modify asbestos claims resolution to date. Unlike some previous reform efforts, the efforts in the 108th Congress attempted to build a broad coalition for asbestos reform, including plaintiff attorneys and labor union leaders as well as defendant corporations and insurers. Two competing strategies emerged from these reform efforts, neither of which was able to secure sufficient support for passage in the 108th Congress. In lieu of federal reform, critics of current asbestos litigation processes look either to state legislatures and courts or to bankruptcy proceedings and personal injury trusts to improve the resolution of asbestos claims in the future.

**Congressional Efforts: (1) Medical Criteria**

One reform strategy, supported by the American Bar Association (ABA) and asbestos plaintiff attorneys who specialize in representing mesothelioma and other cancer victims, seeks to limit compensation for asbestos disease to plaintiffs whose injuries meet certain specified medical criteria (Asbestos Claims Criteria and Compensation Act of 2003, S. 413).<sup>1</sup> In essence, this proposal would prevent people who are not currently functionally impaired and do not have an asbestos-related cancer from claiming compensation in the tort liability system, even if they have clinical evidence of asbestos exposure—e.g., pleural scarring—that under current state law in most jurisdictions would allow them to seek compensation. The statute of limitations for filing an asbestos injury claim would not apply to these claimants until they met the specified medical criteria. To its supporters, the medical criteria approach has the benefit of making arguably minimal changes in the tort liability system, leaving state tort doctrine and procedural rules to answer questions of how to deal with all those claims that met the medical criteria and remained within the litigation system.

Because it would eliminate many asbestos-exposed workers who are currently eligible for compensation from claiming compensation unless and until they met the specified criteria, the medical criteria proposal has been opposed by those who represent these workers, including many asbestos plaintiff attorneys and labor union leaders. Some defendant corporations and insurers also are reluctant to support the medical criteria proposal because they fear that the costs of compensating claimants with mesothelioma and other seriously injured claimants might become so high in the future that these corporations and insurers would not obtain the economic protection they are seeking.

**Congressional Efforts: (2) A Trust Fund**

With the success of the medical criteria proposal in doubt, many defendant corporations and insurers began to pursue an alternative strategy that would eliminate tort liability for asbestos claimants entirely and substitute an administrative compensation program, funded by defendant corporations (including personal injury trusts established in Chapter 11 reorganizations) and insurers (Fair Act of 2004, S. 2290).<sup>2</sup>

The idea of substituting an administrative compensation system for tort liability is not new; most of the legislative initiatives addressing asbestos compensation in previous congresses proposed to substitute some sort of no-fault compensation program

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<sup>1</sup> On the ABA Commission proposal, see, for example, “ABA Delegates Set to Vote on Claims Standard Amid Opposition,” 2003, and “ABA Votes to Adopt Medical Standards, Set to Lobby for Legislation,” 2003. On congressional legislation incorporating the medical criteria approach, see “Bill Seeking Medical Standards in Line with AMA Introduced,” 2003.

<sup>2</sup> On the 108th Congress’s trust fund proposal, see “Hatch Introduces \$108 Billion Asbestos Trust Fund Legislation,” 2003; “Senate Judiciary Committee Issues Report on Trust Fund Legislation,” 2003; and “The Fairness in Asbestos Reform Act—What Will It Do, Where Is It Now?” 2004.

for tort. In the 108th Congress, supporters of the trust fund approach, in an effort to secure support for their proposal from labor union leaders and some asbestos plaintiff attorneys, did not propose to limit compensation wholly to cancer victims and those with severe respiratory impairment. As a result, some defendants and insurers became worried that eligibility for compensation from the trust fund would be so broad that the trust fund would be overwhelmed. As negotiations continued, the price tag for the proposed fund mounted to a level that some were unwilling to support.

Moreover, the trust fund proposal, unlike the medical criteria approach (which would have left each defendant to respond to the suits that remained within the tort system as it saw fit), requires that defendant corporations and insurers agree on a funding formula. Possible factors for determining funding include market share at key points in the history of asbestos use, historical patterns of asbestos compensation, and reserves set aside to pay asbestos claims. Deciding how bankruptcy personal injury trusts should be factored into the funding equation further complicates the decisionmaking process. Because defendants and insurers are differently positioned with regard to these factors, they were not able to reach agreement on a formula before the time for congressional action had expired.

The trust fund proposal also requires grappling with the question that has challenged designers of asbestos personal injury trusts in Chapter 11 proceedings, as well as those who have sought to negotiate long-term settlements of asbestos litigation outside of bankruptcy: How many more claimants will appear in the future? With the federal government unwilling to act as guarantor of the trust fund, payors' and claimants' representatives need to consider what might happen if the amount originally negotiated proves to be inadequate. The suggestion that claims would then revert to the tort liability system has so far been unacceptable to critical parties to the negotiations over the trust fund plan.

### **State Reform Efforts**

With the success of congressional initiatives in doubt, by the end of 2004, reformers were turning their attention to the states. Medical criteria statutes were introduced into state legislatures in Louisiana, Ohio, and Texas. Legislation limiting successor liability, adopted previously by the Pennsylvania legislature, was adopted in Texas<sup>3</sup> as well. Venue rules that had invited large-scale consolidations in Mississippi were amended, and stricter venue rules were also adopted in Texas. An increasing number of courts were considering and adopting deferred dockets (see Chapter Three). Together, these changes may temper the rise in frequency of claiming for asbestos diseases. But such efforts are likely to leave in place a patchwork of tort doctrine and mass litigation procedural rules that promises continuing variation in asbestos out-

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<sup>3</sup> See "Texas Legislature Passes Tort Reform Bill Limiting Successor Liability Damages," 2003.



comes for plaintiffs and defendants and does little to mitigate the high transaction costs of asbestos litigation.

#### **Bankruptcy and Personal Injury Trusts**

With an increasing number of corporations in Chapter 11 reorganization, some observers have suggested that the personal injury trusts that usually result from Chapter 11 bankruptcy reorganization offer the most promising means of resolving asbestos claims quickly and with lower transaction costs, particularly if the debtors and tort creditors negotiate “prepackaged bankruptcies” before a formal petition for Chapter 11 reorganization is filed. “Pre-packs” have the potential to substantially shorten the Chapter 11 process, which historically has averaged about six years for asbestos defendants. But some plans that have emerged from pre-pack processes have proved controversial, resulting in lengthy appellate processes and ancillary litigation. Moreover, some of these plans have been challenged on grounds of unfairness to certain classes of asbestos plaintiffs (see Chapter Three). Whether bankruptcy proceedings and personal injury trusts will significantly improve the resolution of asbestos claims is uncertain.

## APPENDIX A

**Comparison of Projections of Asbestos-Related Diseases**

This appendix provides further discussion of the early projections of asbestos-related diseases discussed in Chapter Two and displayed in Table 2.2. That table is reproduced here as Table A.1 for easy reference.

Of the 229,000 excess cancer deaths due to asbestos exposure from 1985 to 2009, Nicholson et al. (1982) predicted that 70,870 would be due to mesothelioma. As shown in Table A.1, Walker et al. (1983) projected 15,500 to 18,100 cases of asbestos-related mesothelioma among asbestos workers for the same period. Estimates of mesothelioma from other studies conducted at about the same time fall between these two sets of projections.

Figure A.1 compares experts' predictions of the incidence of death from mesothelioma over time. According to predictions by Nicholson et al. (1982), mesothelioma deaths among persons employed in selected industries and occupations would increase from 1,775 in the year 1982 to more than 3,000 in 2002, then decrease to less than 1,000 by 2027. The Walker et al. (1983) study estimated occupation-

**Table A.1**  
**Projections of Asbestos-Related Cancers Among Asbestos Workers, 1985–2009**

Study	Mesothelioma	Lung Cancer	Gastrointestinal and Other Cancers	Total <sup>a</sup>
Higginson (1980)	25,000	37,500	æ	62,500
Enterline (1981)	16,650	63,525	æ	80,175
Peto et al. (1981)	20,925	79,515	æ	100,440
McDonald and McDonald (1981)	22,870	123,750	æ	146,620
Nicholson et al. (1982)	70,870	124,210	33,715	228,795
Walker et al. (1983)	15,500–18,100	23,885 <sup>b</sup>	æ	39,385–41,985
Lilienfeld et al. (1988)	21,500	76,700	33,000	131,200

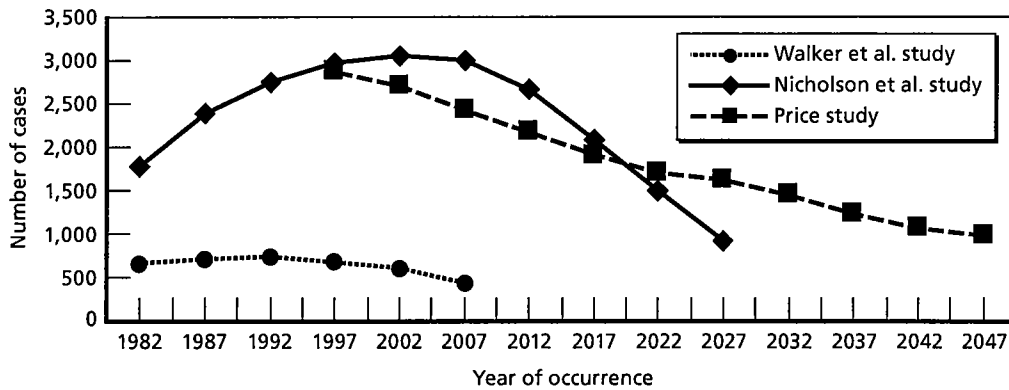
SOURCE: Lilienfeld et al. (1988), Table 2 (with minor corrections).

NOTE: æ = Not reported.

<sup>a</sup> "Total" includes only the types of cancer reported in the projections.

<sup>b</sup> From Table 8 in Manton (1983).

**Figure A.1**  
**Projections of Mesothelioma in the United States, 1982–2047**



RAND MG162-A.1

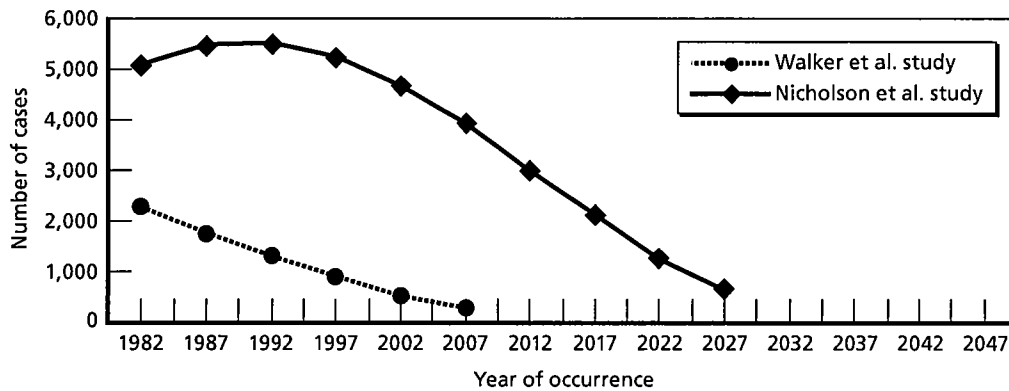
related mesothelioma cases among asbestos workers to be about 640 in 1982, rising to a high of 720 in 1992 and decreasing to 420 in 2007. A more recent study by Price (1997) estimated about 2,000 mesothelioma cases in 1992 in the United States, increasing to about 2,850 in 1997.

After 1997, Price predicted that the number of mesothelioma cases would decrease each year to about 975 by 2047. Based on his projections, the number of mesothelioma cases per year stabilizes at this level until 2067.

Despite the fact that mesothelioma is considered to be a signature disease for asbestos exposure, even more asbestos-related lung cancers than mesothelioma have been predicted to occur. Predictions of asbestos-related lung cancers occurring between 1985 and 2009 among asbestos workers vary; Walker et al. (1983) predicted 23,885 cases, whereas Nicholson et al. (1982) predicted 124,210 deaths. As with the mesothelioma estimates, the estimates of lung cancer by other projection studies in the 1970s and 1980s fall between these two predictions.

Figure A.2 compares experts' predictions of the incidence of lung cancer deaths due to asbestos exposure. The Nicholson study predicted more than 5,000 excess lung cancer deaths caused by occupational asbestos exposure would occur each year between 1982 and 1997, increasing to a maximum of 5,497 in 1992, then decreasing thereafter to 646 deaths in 2027. The Walker study estimated that 2,278 cases of lung cancer due to "plausible" asbestos exposure would occur in 1982, a figure that would decline rapidly to 284 by 2007. The Nicholson estimates range from twice as high as the Walker estimates (5,055 compared with 2,278 in 1982) to 13 times higher (3,921 compared with 284 in 2007).

**Figure A.2**  
**Projections of Asbestos-Related Lung Cancer in the United States, 1982–2047**



RAND MG162-A.2

Data on asbestosis cases or deaths are limited and unreliable because asbestosis generally is not fatal. Using data from the Walker study, Manton (1983) estimated that 2,774 excess deaths due to asbestosis would occur in 1982, decreasing to 734 in 2007 (not shown). The other studies cited in Table A.1 did not predict cases of asbestosis.

Based on a report by the National Institute for Occupational Safety and Health (NIOSH, 2004), the number of deaths among U.S. residents 15 years and older that were coded as caused by asbestosis increased from 77 in 1968 to 1,265 in 1999 (see Table A.2). The rapid increase in asbestosis deaths observed from 1968 to 1988 represents the delayed effects among workers exposed to asbestos during its peak use, starting in the mid-1940s. These figures represent deaths with asbestosis coded on the death certificate as either the underlying (i.e., main) or a contributing cause of death. According to the 2004 NIOSH report, asbestosis was coded as the main cause for about a third of these deaths throughout this time period. But the number of deaths underestimates the number of persons with asbestosis because asbestosis was often not listed on a death certificate as a cause of death even among persons having asbestosis at the time of their death because it is not always fatal.

### Limitations of Projections

Although Nicholson et al. (1982) is the leading reference on projecting asbestos-related disease, the estimates from that study have two major limitations. First, the estimates might not include all workers who had significant exposure to asbestos between 1940 and 1979. Nicholson et al. restricted their worker cohorts to persons

**Table A.2**  
**Deaths Due to Asbestosis Among**  
**U.S. Residents 15 Years of Age and**  
**Older, 1968–1999**

Year of Death	Number of Deaths
1968	77
1969	71
1970	87
1971	83
1972	138
1973	117
1974	114
1975	126
1976	143
1977	163
1978	240
1979	309
1980	339
1981	318
1982	428
1983	476
1984	445
1985	534
1986	702
1987	710
1988	769
1989	878
1990	948
1991	946
1992	959
1993	999
1994	1,060
1995	1,169
1996	1,176
1997	1,171
1998	1,221
1999	1,265

SOURCE: NIOSH, 2004.

NOTE: Includes all deaths with asbestosis recorded as either the underlying (i.e., main) cause or as a contributory cause.

working in specific industries and occupations who were most likely to be exposed to higher levels of asbestos. These industries include *primary manufacturing*, including asbestos products (such as friction products, pipe and sheet, asbestos textiles, floor tiles, roofing, and insulating and other building materials), gaskets, packing and sealing devices, and building paper and building board mills; *secondary manufacturing*, including heating equipment, boiler shops, industrial furnaces and ovens, and

electric housewares and fans; *shipbuilding and repair*; and *construction*, including general contractors in residential and nonresidential building construction and in water, sewer, pipeline, communication, and power line construction. Nicholson et al. also identified workers in certain occupations who were at significant risk of asbestos exposure. Those workers included asbestos and insulation workers, automobile body repairers and mechanics, engine room personnel in the maritime industry, maintenance employees in chemical and petroleum manufacturing and in the railroad industry, stationary engineers, stationary firemen, and power station operators. In all, Nicholson et al. (1982) estimated that approximately 27.5 million workers in these industries and occupations had been exposed to asbestos from 1940 to 1979.

In recent years, workers from industries and occupations not included in Nicholson et al.'s analysis have begun to file claims for asbestos-related injury. The etiology of these injury claims is sharply disputed. Some litigators on both the plaintiff and defense sides argue that most workers in these industries have not actually suffered significant asbestos exposure or injury and they should not be compensated for asbestos-related injury. Other litigators argue that Nicholson et al. simply focused on the potential for asbestos exposure and asbestos-induced disease in high-risk industries and occupations and ignored the risk of exposure in other industries. We have not been able to find any epidemiological study that has systematically investigated asbestos exposure and the incidence of asbestos-induced disease that includes all industries and occupations in the United States.<sup>1</sup> Although some studies project cases of disease, not deaths (e.g., Walker et al. [1983], Price [1997], Price and Ware [2004]), no study has provided a reliable estimate of how many people are sick at a given point in time as a result of occupational exposure to asbestos.

A second limitation of the Nicholson et al. study is that the study's estimates do not include workers exposed to asbestos after 1979 who subsequently develop asbestos-related disease. The analysis is restricted to those working with asbestos between 1940 and 1979. Although regulations implemented during the 1960s and 1970s greatly reduced occupational exposure, U.S. industries continued to produce and process asbestos after 1979 (Agency for Toxic Substances and Disease Registry [ATSDR], 2001). The volume of asbestos produced by U.S. mines decreased from 299 million pounds in the late 1960s and early 1970s to 112 million pounds in 1987 and 37 million pounds in 1989. Production continued to decrease until it reached 13.2 million pounds in 1999. As of 2001, a total of 65 facilities in 27 states reported producing, processing, or using asbestos (ATSDR, 2001). Clearly, many workers have been exposed to asbestos since 1979.

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<sup>1</sup> Some analysts have examined patterns of legal claiming by industry (Manville Personal Injury Settlement Trust, 2001).